STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY

FACT SHEET

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATER
INTO WATERS OF THE COMMONWEALTH

KPDES No.: KY0073059 **Permit Writer:** Diana Davidson **Date:** February 2, 2010
AI No.: 437

1. **SYNOPSIS OF APPLICATION**

a. Name and Address of Applicant

Girl Scouts of Kentuckiana
P.O. Box 32335
Louisville, Kentucky 40232-2335

b. Facility Location

Camp Shantituck
3825 East Hebron Lane
Shepherdsville, Bullitt County, Kentucky

c. Description of Applicant's Operation

Scouting Camp

d. Design Capacity

0.010 MGD

e. Description of Existing Pollution Abatement Facilities

Treatment consists of comminutor, screening, sedimentation, coagulation, dechlorination, and activated sludge.

2. RECEIVING WATER

a. Name/Mile Point

Facility discharges to Cedar Creek at latitude 38°02'48" and longitude 85°39'30".

b. Stream Segment Use Classification

Pursuant to 401 KAR 10:026, Section 5, Cedar Creek carries the following classifications:

Warmwater Aquatic Habitat, Fish Consumption, and Primary/Secondary Contact Recreation

c. Stream Segment Categorization

Pursuant to 401 KAR 10:030, Section 1 Cedar Creek is categorized as a High Quality Water

The Division's Total Maximum Daily Load (TMDL) for Floyds Fork was approved by the United States Environmental Protection Agency Region IV meeting full compliance with Section 303(d) of the Clean Water Act, which requires that TMDLs be established at levels necessary to implement the applicable water quality standards. This TMDL was for organic enrichment and low dissolved oxygen.

Cedar Creek (high quality water) discharges within the Floyd's Fork watershed. Limits are consistent with the approved Floyd's Fork Watershed TMDL.

Cedar Creek (high quality water) discharges within the impaired Floyd's Fork watershed.

d. Stream Low Flow Condition

The 7-day, 10-year low flow and harmonic mean conditions of Cedar Creek are 2.0 and unknown cfs, respectively.

3. REPORTED DISCHARGE AND PROPOSED LIMITS

Serial Number 001 – Sanitary Wastewater (Design Flow = 0.010 MGD)

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	0.0018	0.0067	Report	Report	401 KAR 5:065, Section 2(4) 40 CFR 122.4(i)(1)(ii)
BOD_5 (mg/l)	2.63	2.63	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
TSS (mg/l)	3.95	3.95	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 2 and 3
Fecal Coliform (N/100 ml)	11.30	11.30	Removing from permit		401 KAR 5:080, Section 2(3)
Escherichia Coli (N/100 ml)	NR	NR	130	240	401 KAR 10:031, Section 7 401 KAR 5:045, Section 4 401 KAR 5:080, Section 2(3)
Ammonia Nitrogen (as mg/l N)	1.13	1.13	20	30	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
Dissolved Oxygen (mg/l) (minimum)	8.37	N/A	Not less than 2.0		401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
pH (standard units)	5.78	8.0	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4 401 KAR 5:045, Section 4
Total Residual Chlorine (mg/l)	NR	NR	0.011	0.019	401 KAR 10:031, Section 4(k)
Total Phosphorus (mg/l)	NR	NR	1.0	2.0	401 KAR 5:065, Section 2(8) 401 KAR 5:080, Section 2(3)
Total Nitrogen (mg/l)	NR	NR	Report	Report	401 KAR 5:065, Section 2(8)

The data contained under the reported discharge columns is not from the renewal application, but rather from the analysis of the DMR data that has been reported during the term of the previous permit.

The abbreviation BOD_5 means Biochemical Oxygen Demand (5-day).
The abbreviation TSS means Total Suspended Solids.
The abbreviation NR means not reported on the Discharge Monitoring Report (DMR).
The effluent limitations for BOD_5 and TSS are Monthly (30 day) and Weekly (7 day) Averages.
The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.
Total Nitrogen is to be reported as the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen.

4. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfall 001 Sanitary Wastewater (Design Flow = 0.010 MGD)

b. Effluent Characteristics

Flow, BOD_5, TSS, Fecal Coliform Bacteria, *Escherichia Coli*, pH, Ammonia Nitrogen, Dissolved Oxygen, Total Phosphorus, Total Nitrogen, and Total Residual Chlorine (TRC).

c. Pertinent Factors

None

d. Monitoring Requirements

Flow monitoring shall be conducted instantaneously once per quarter.

BOD_5, TSS, Ammonia Nitrogen, Total Phosphorus and Total Nitrogen shall be monitored once per quarter by 24 hour composite sampling.

Twenty-four hour (24) composite sample means not less than twelve (12) effluent portions collected at regular intervals over a period of twenty-four (24) hours which are composited in proportion to flow.

Escherichia Coli, pH, Dissolved Oxygen and Total Residual Chlorine shall be monitored once per quarter by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

Escherichia Coli and Fecal Coliform Bacteria
The limits for *Escherichia Coli* are consistent with the requirements of 401 KAR 10:031, Section 7, 401 KAR 5:045 Section 4 and 401 KAR 5:080, Section 2(3). The removal of Fecal Coliform Bacteria is consistent with the requirements of 401 KAR 5:080k Section 2(3). Although Fecal Coliform Bacteria has been used as an indicator of fecal contamination, it does contain other species that are not necessarily fecal in origin. EPA recommends *Escherichia Coli*, which is specific to fecal material from warm-blooded animals, as the best indicator of health risk from contact with recreational waters. Therefore, it is the “Best Professional Judgment “BPJ” of the Division of Water that *Escherichia Coli* replace Fecal Coliform Bacteria on this permit.

Flow
The monitoring requirements for this parameter are consistent with the requirements of 40 CFR 122.44(i)(1)(ii) as incorporated by 401 KAR 5:065, Section 2(4).

Ammonia Nitrogen, and Dissolved Oxygen
The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4, and 401 KAR 5:045, Sections 3 and 5. Section 4 of 5:031 establishes water quality criteria for the protection of Kentucky's waters. Section 5 of 5:045 requires biochemically degradable wastewaters to receive treatment in excess of secondary treatment if the Cabinet determines that the receiving water would not satisfy applicable water quality standards as a result of a facility discharge or discharges from multiple facilities.

BOD_5 and Total Suspended Solids
The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Sections 2 and 3. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Sections 2 and 3 of 5:045 require biochemically degradable wastewaters to receive secondary treatment.

pH
The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Section 4. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Section 4 of 5:045 establishes the acceptable levels of these parameters for biochemically degradable wastewaters.

Total Residual Chlorine
The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4.

Total Phosphorus
The limits for phosphorus are consistent with the requirements of 401 KAR 5:080, Section 2(3). These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) determination of the "Best Practicable Technology Currently Available" (BPT) and "Best Available Technology Economically Achievable" (BAT) requirements for these pollutants.

Total Phosphorus and Total Nitrogen
The monitoring requirements for these/this parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8)(a). Total Nitrogen is TKN (as N) and nitrate/nitrite (as N).

5. ANTIDEGRADATION

The conditions of 401 KAR 10:029, Section 1 have been satisfied by this permit action. Since this permit action involves reissuance of an existing permit, and does not propose an expanded discharge, a review under 401 KAR 10:030 Section 1 is not applicable.

6. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

The permittee will comply with all effluent limitations by the effective date of the permit.

7. PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

Disposal of Non-Domestic Wastes
The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures. This requirement is consistent with the requirements of 401 KAR 5:065, Section 1(5) and 401 KAR 5:080, Section 2(3).

Certified Operators
Pursuant to 401 KAR 5:010, Section 1 wastewater systems shall be operated under the supervision of a certified operator who holds a Kentucky Certificate equivalent to the class of system being supervised.

Pursuant to 401 KAR 5:010, Section 3 the certified operator shall be reasonably available if not physically present while the system is operating.

Outfall Signage
The KPDES permit establishes monitoring points, effluent limitations, and other conditions to address discharges from the permitted facility pursuant 40 CFR 122.48. In an effort to better document and clarify these locations the permittee should place and maintain a permanent marker at each of the monitoring locations.

8. **PERMIT DURATION**

Five (5) years. This facility is in the Salt, Licking Basin Management Unit as per the Kentucky Watershed Management Framework.

9. **PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

10. **REFERENCES AND CITED DOCUMENTS**

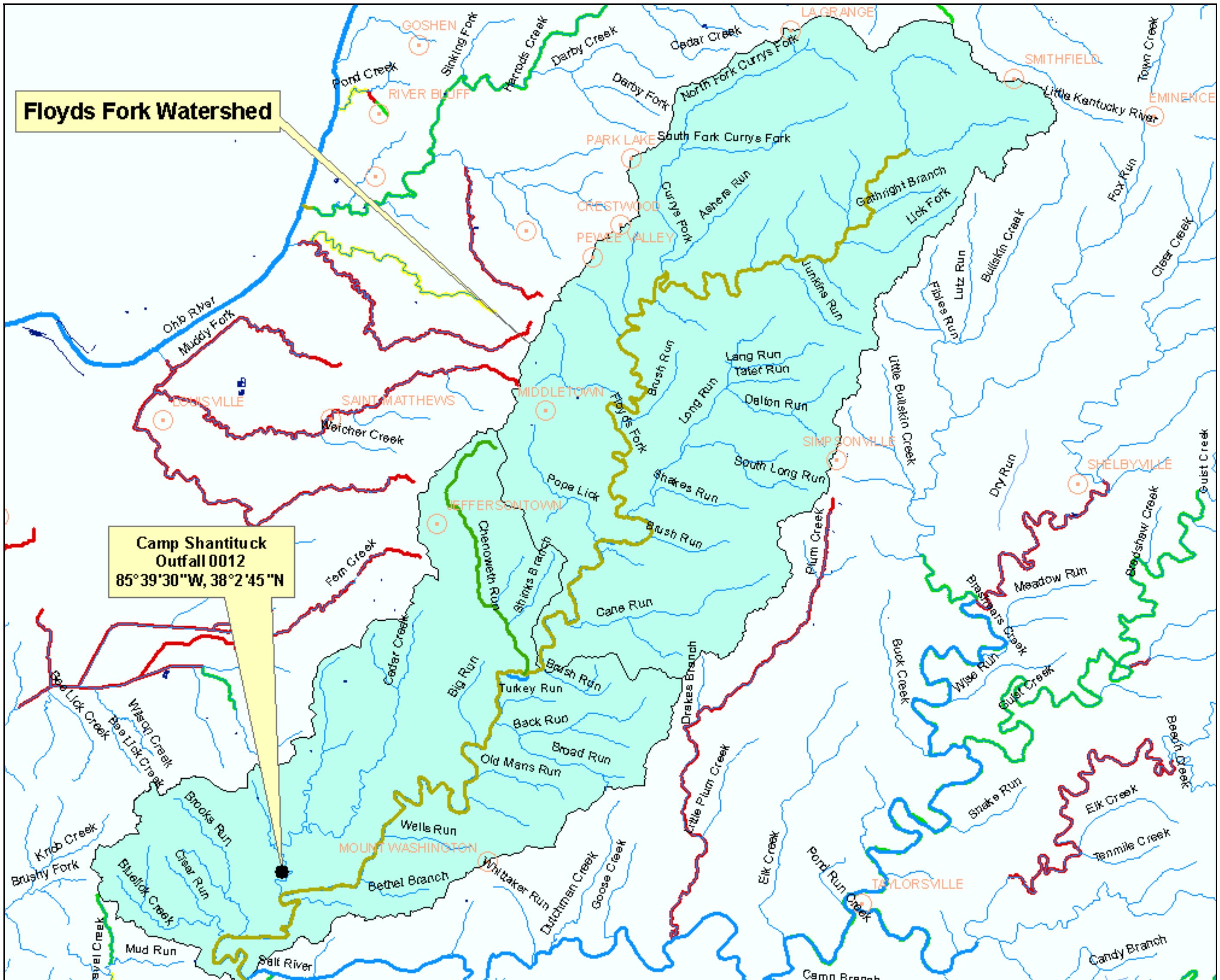
All material and documents referenced or cited in this fact sheet are a part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

11. **CONTACT**

For further information on the draft permit or comment process, contact the individual identified on the Public Notice or the Permit Writer – Diana Davidson at (502) 564-8158, extension 4901, or email Diana.Davidson@ky.gov.

12. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final decision, deadline for comments and other information required by 401 KAR 5:075, Section 4(2)(e).


Floyds Fork Watershed
Camp Shantituck
Outfall 0012
85°39'30"W, 38°2'45"N
GOSHEN
RIVER BLUFF
LA GRANGE
SMITHFIELD
EMINENCE
PARK LAKE
CRESTWOOD
PEWEE VALLEY
MIDDLETOWN
LOUISVILLE
SAINT MATTHEWS
JEFFERSONTOWN
SIMPSONVILLE
SHELBYVILLE
MOUNT WASHINGTON
TAYLORSVILLE
Ohio River
Muddy Fork
Pond Creek
Sinking Fork
Harrods Creek
Darby Creek
Cedar Creek
North Fork Currys Fork
South Fork Currys Fork
Currys Fork
Ashers Run
Gathright Branch
Lick Fork
Little Kentucky River
Town Creek
Fox Run
Bullskin Creek
Clear Creek
Lutz Run
Fibles Run
Jumkins Run
Long Run
Tater Run
Dalton Run
Brush Run
Floyds Fork
South Long Run
Little Bullskin Creek
Weicher Creek
Pope Lick
Shakes Run
Dry Run
Guist Creek
Fern Creek
Chenoweth Run
Shinks Branch
Cane Run
Plum Creek
Meadow Run
Bradshaw Creek
Brashears Creek
Cedar Creek
Big Run
Turkey Run
Back Run
Broad Run
Old Mans Run
Drakes Branch
Buck Creek
Wise Run
Clear Creek
Beech Creek
Wilson Creek
Pea Lick Creek
Little Plum Creek
Wells Run
Snake Run
Elk Creek
Tenmile Creek
Knob Creek
Brushy Fork
Brooks Run
Bluelick Creek
Bethel Branch
Whittaker Run
Dutchman Creek
Goose Creek
Elk Creek
Pond Run
Mud Run
Salt River
Camp Branch
Candy Branch

KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KY0073059
AI NO.: 437

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Girl Scouts of Kentuckiana
P.O. Box 32335
Louisville, Kentucky 40232-2335

is authorized to discharge from a facility located at

Camp Shantituck
3825 East Hebron Lane
Shepherdsville, Bullitt County, Kentucky

to receiving waters named

Cedar Creek at latitude 38°02'48" and longitude 85°39'30"

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, and IV hereof. The permit consists of this cover sheet, and Part I 2 pages, Part II 1 pages, and Part III 1 page.

This permit shall become effective on.

This permit and the authorization to discharge shall expire at midnight, .

Date Signed

Sandra L. Gruzesky, Director
Division of Water

PART I A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 – Sanitary Wastewater (Design Flow = 0.010 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS (lbs/day)		DISCHARGE LIMITATIONS Other Units (Specify)		MONITORING REQUIREMENTS	
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Quarter	Instantaneous
BOD_5 (mg/l)	2.50	3.75	30	45	1/Quarter	24 Hr Composite
TSS (mg/l)	2.50	3.75	30	45	1/Quarter	24 Hr Composite
Ammonia Nitrogen (as mg/l N)	1.67	2.50	20	30	1/Quarter	24 Hr Composite
Escherichia Coli (N/100 ml)	N/A	N/A	130	240	1/Quarter	Grab
Dissolved Oxygen (mg/l) (minimum)	N/A	N/A	Not less than 2.0		1/Quarter	Grab
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Quarter	Grab
Total Residual Chlorine (mg/l)	N/A	N/A	0.011	0.019	1/Quarter	Grab
Total Phosphorus (mg/l)	N/A	N/A	1.0	2.0	1/Quarter	24 Hr Composite
Total Nitrogen (mg/l)	N/A	N/A	Report	Report	1/Quarter	24 Hr Composite

The abbreviation BOD_5 means Biochemical Oxygen Demand (5-day).
The abbreviation TSS means Total Suspended Solids.
The abbreviation N/A means Not Applicable.
The effluent limitations for BOD_5 and TSS are Monthly (30 day) and Weekly (7 day) Averages.
The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.
Total Nitrogen is to be reported as the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

PART I B - SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with all requirements on the effective date of this permit.

PART II - STANDARD CONDITIONS FOR KPDES PERMIT

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

All conditions of 40 CFR 122.41 (401 KAR 5:065, Section 2(1)) are hereby incorporated by reference as conditions of this permit.

PART III - OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Division of Water
Louisville Regional Office
9116 Leesgate Road
Louisville, Kentucky 40222-5084
ATTN: Supervisor

Division of Water
Surface Water Permits Branch
Permit Support Section
200 Fair Oaks Lane
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Disposal of Non-Domestic Wastes

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures.

D. Certified Operators

This wastewater system shall be operated under the supervision of a Class I Kentucky Certified Operator who shall be reasonably available at all times. All other operators employed by the system shall hold a Kentucky Certificate or shall be in the process of obtaining a Kentucky Certificate. The certificates of each operator shall be prominently displayed on the wall of the system office.

E. Outfall Signage

The KPDES permit establishes monitoring points, effluent limitations, and other conditions to address discharges from the permitted facility. In an effort to better document and clarify these locations the permittee should place and maintain a permanent marker at each of the monitoring locations.